



DEPARTMENT OF SCIENCE

COURSE OUTLINE – Winter 2017

CS 2000 - Data Communications and Networking 3 (3-0-0) UT

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OFFICE HOURS: TBA

CALENDAR DESCRIPTION:

This course provides an introduction to computer communications and computer networks. Topics will include communication hardware and software, protocols, local area and wide area networks, and network management.

PREREQUISITE(S)/COREQUISITE:

None

REQUIRED TEXT/RESOURCE MATERIALS:

Computer Networking : A Top-Down Approach . 7th edition by James Kurose & Keith Ross

DELIVERY MODE(S): Classroom

COURSE OBJECTIVES:

This course will introduce students to :

- the internet protocol stack.
- application-layers protocols such as HTTP, SMTP, DNS,FTP.
- the TCP and UDP transport layer protocols.
- the IP network-layer protocol as well as other network-layer protocols such as ICMP.
- the link-layer, LANs and Ethernet

LEARNING OUTCOMES:

As a result of taking this course, students will gain the ability to :

- demonstrate and articulate fundamental knowledge of the various protocols found at the different layers of the internet protocol stack.
- identify the protocols that are work in the different network applications that users interact with.

TRANSFERABILITY:

Athabasca University

University of Lethbridge

King's University College *

Other (transfers in combination with other courses or to other institutions)

*** An asterisk (*) beside any transfer institution indicates important transfer information.** Please consult the Alberta Transfer Guide for more information (www.albertatransfer.com)

**** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability**

EVALUATIONS:

Assignments	30%
First Term exam	20%
Second Term Exam	20%
Final Exam	30%

*****There is a 30% penalty for late (less than 2 days) assignment. Assignments which are more than 2 days late will not be accepted.**

SOME IMPORTANT POINTS TO REMEMBER WHEN COMPLETING ASSIGNMENTS

- I. Your name and assignment number must appear on all assignments that you turn in.
- II. All written assignments must be submitted in PDF format.
- III. All assignments must be submitted electronically through the course web page. The name of the submitted file must conform exactly to the format that I provide. Any

deviations WILL NOT be accepted.

If any of these conditions are not met, your assignment WILL NOT be marked.

GRADING CRITERIA: Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**. This means **DO NOT GET LESS THAN “C-” IF YOU ARE PLANNING TO TRANSFER TO A UNIVERSITY.**

Alpha Grade	4-point Equivalent	Percentage Guidelines	Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	90-100	C+	2.3	67-69
A	4.0	85-89	C	2.0	63-66
A-	3.7	80-84	C-	1.7	60-62
B+	3.3	77-79	D+	1.3	55-59
B	3.0	73-76	D	1.0	50-54
B-	2.7	70-72	F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

- Computer Networks and the Internet
- Application Layer and protocols - HTTP, FTP, SMTP, DNS
- Transport Layer and protocols - UDP, TCP
- Network Layer and protocol - IP, ICMP, routing
- Link Layer and protocols - Ethernet, ARP
- Wireless and Mobile networks

STUDENT RESPONSIBILITIES:

Students must make an effort to attend ALL classes. If you have more than 5 un-excused absences you may be barred from writing the final exam

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the College Admission Guide at <http://www.gprc.ab.ca/programs/calendar/> or the College Policy on Student Misconduct: Plagiarism and Cheating at www.gprc.ab.ca/about/administration/policies/ **

**Note: all Academic and Administrative policies are available on the same page.

